

## AMENDMENTS

1. (Currently Amended) A system for attenuating leakage signals in a communication system, comprising:

a multiple virtual line (MVL) transmitter configured to provide ~~communicate~~ signals ~~onto~~ to a plurality of ~~communication connections~~ subscriber loops, each ~~communication connection~~ subscriber loop having a tip connection and a ring connection, the MVL transmitter having a first transmit output (Tx+) and a second transmit output (Tx-):

an amplifier-based coupler coupled between the MVL transmitter and the plurality of ~~communication connections~~ subscriber loops, the amplifier-based coupler comprising:

a first amplifier having an output at least coupled to ~~the~~ each tip connection ~~of~~ in the plurality of ~~communication connections~~ subscriber loops and at least one input coupled to the Tx+ output of the MVL transmitter, and configured to have a nearly-zero impedance characteristic; and

a second amplifier having an output at least coupled to ~~the~~ each ring connection ~~of~~ in the plurality of ~~communication connections~~ subscriber loops and at least one input coupled to the Tx- output of the MVL transmitter, and configured to have a nearly-zero impedance characteristic,

such that at least one leakage signal originating on a first ~~one communication connection~~ subscriber loop in ~~of~~ said plurality of ~~communication connections~~ subscriber loops cannot propagate from ~~said first communication connection~~ subscriber loop to a second ~~communication connection~~ subscriber loop in ~~of~~ said plurality of ~~communication connections~~ subscriber loops.



2. (Original) The system of claim 1, wherein at least one of said plurality of amplifiers is configured as a negative feedback amplifier.

3. (Currently Amended) The system of claim 1, further comprising a second plurality of amplifiers, said second plurality of amplifiers coupled between a second plurality of ~~communication connections~~ subscriber loops and said ~~communication device~~ MVL transmitter.

4. (Currently Amended) The system of claim 1, wherein at least one of said plurality of ~~communication connections~~ subscriber loops is a digital subscriber loop.

5. (Currently Amended) A method for shunting leakage signals in a communication system, the method comprising the steps of:

receiving a differential digital signal, said differential digital signal composed of a plurality of subscriber signals, each subscriber signal associated with a different subscriber;

coupling a first amplifier between the positive differential digital signal and each tip connection in a plurality of subscriber loops ~~a tip connection of a first communication connection and a first output (Tx+) of a communication device~~, said first amplifier having a nearly-zero impedance characteristic;

coupling a second amplifier between the negative differential digital signal and each ring connection in the plurality of subscriber loops ~~a ring connection of a first communication connection and a first output (Tx-) of a communication device~~, said second amplifier having a nearly-zero impedance characteristic; and

shunting at least one leakage signal originating on said first communication connection a first subscriber loop in the plurality of subscriber loops away from a second ~~communication~~



~~connection coupled to said communication device~~ subscriber loop in the plurality of subscriber loops.

6-11. (Cancelled)

12. (Currently Amended) The system of claim 1, wherein said first ~~communication connection~~ subscriber loop is physically coupled to said second ~~communication connection~~ subscriber loop.

13. (Currently Amended) The system of claim 1, wherein said plurality of ~~communication connections~~ subscriber loops are physically coupled together.

14. (Previously Presented) The system of claim 1, wherein said plurality of ~~communication connections~~ subscriber loops are physically coupled to said ~~communication device~~ MVL transmitter.

15-17. (Cancelled)

18. (Currently Amended) The system of claim 1, wherein said MVL transmitter time multiplexes ~~[[a]] the plurality of~~ signals onto a single channel.

19. (Currently Amended) The system of claim 1, wherein said MVL transmitter frequency multiplexes ~~[[a]] the plurality of~~ signals onto a plurality of channels.

20. (Previously Presented) The system of claim 1, wherein said MVL transmitter is a signal multiplexing communication device.



21. (Previously Presented) . A system for shunting leakage signals in a communication system, comprising:

means for receiving a differential digital signal from a digital device, said differential digital signal composed of a plurality of subscriber signals, each subscriber signal associated with a different subscriber, said differential digital signal concurrently providing voice service to each of the subscribers;

means for coupling a first amplifier between the positive differential digital signal and each tip connection in a plurality of subscriber loops ~~a tip connection of a first communication connection and a first output (Tx+) of a communication device~~, said first amplifier having a nearly-zero impedance characteristic;

means for coupling a second amplifier between the negative differential digital signal and each ring connection in the plurality of subscriber loops ~~a ring connection of a first communication connection and a first output (Tx-) of a communication device~~, said second amplifier having a nearly-zero impedance characteristic; and

means for shunting such that at least one leakage signal originating on said first communication connection a first subscriber loop in the plurality of subscriber loops is shunted away from a second communication connection subscriber loop in the plurality of subscriber loops coupled to said communication digital device.

22. (Currently Amended) The system of claim 21, wherein said ~~coupling~~ means for coupling the first amplifier further couples said second ~~communication connection~~ subscriber loop to said shunting means.

23. (New) The system of claim 1, wherein said MVL transmitter is further configured to concurrently provide signals to said plurality of subscriber loops.



24. (New) The method of claim 5, wherein said differential digital signal time multiplexes said plurality of subscriber signals onto a single channel.
25. (New) The method of claim 5, wherein said differential digital signal frequency multiplexes said plurality of subscriber signals onto a plurality of channels.
26. (New) The method of claim 5, wherein said differential digital signal concurrently provides voice service to each of the subscribers.
27. (New) The system of claim 21, wherein said differential digital signal time multiplexes said plurality of subscriber signals onto a single channel.
28. (New) The system of claim 21, wherein said differential digital signal frequency multiplexes said plurality of subscriber signals onto a plurality of channels.
29. (New) The method of claim 5, wherein said differential digital signal concurrently provides voice service to each of the subscribers.